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Collection and Field Note Book

No. 73

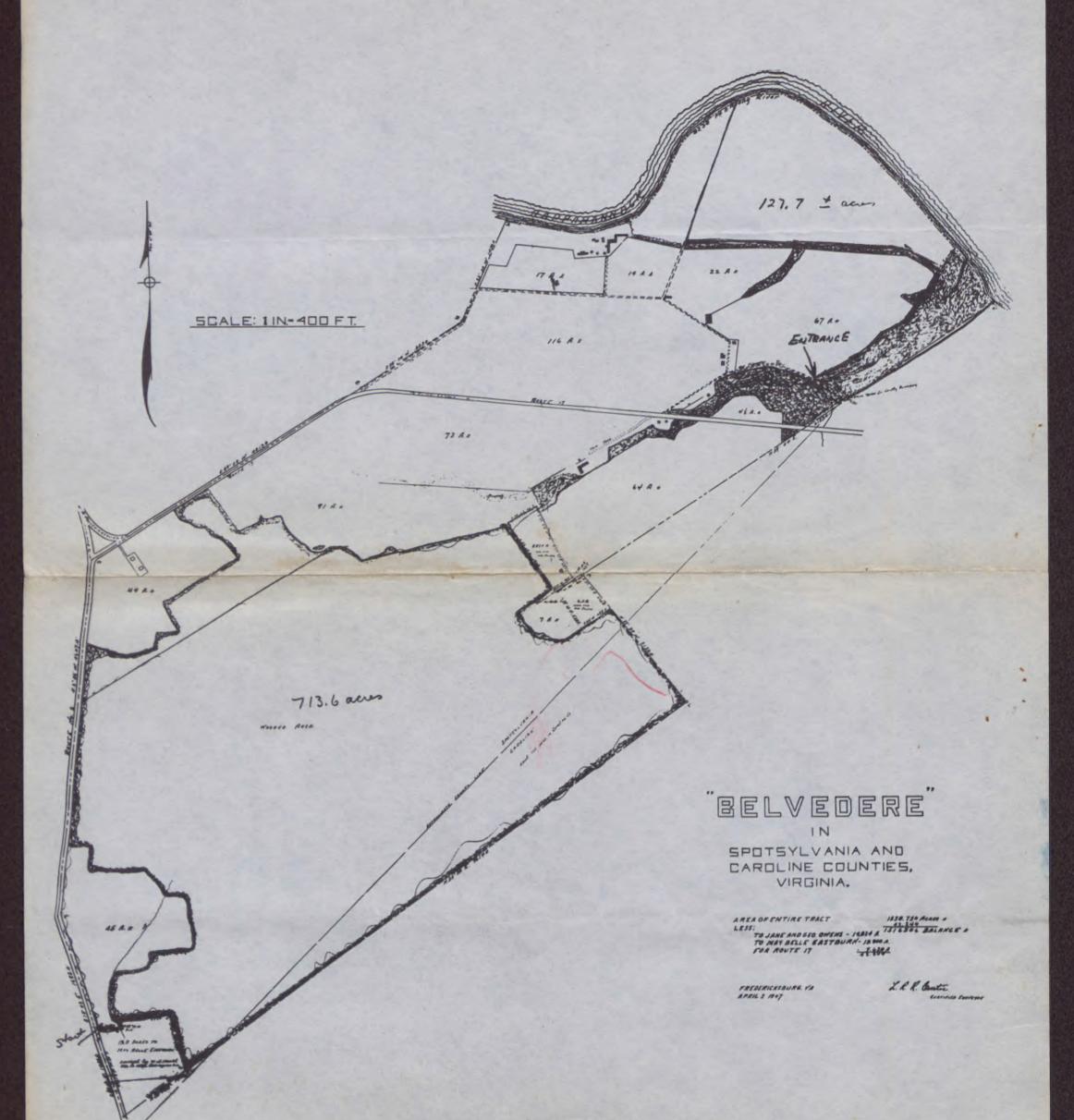
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1944 My 10 - aintry n.y. to Caraca. left 4.30 pm. Comain 88- left side at The pm, two nather male island, - rather tringula in shap fargely sauly large fare acar, northe one with a small dagon very flat. not very green. 7119 Histraniole - bul visibility very bon, May 12 - Caraca Mangifera indica Eupherbia cotinifolia Enghorbia fullalarina Entre Circalli

wingandia on why ent, belt in less developed mostly in navine, much mere burning here I bow photos of a very degraded hill with Pleridium & scalleiel bushes near to Tepue, Beyond here the hills and extremely denuded any much burned one, Only scattered patches of woody regetation. Cierofier very common in a little farther down the woodly vegetation beennes deciditores. The cover becomes more abundant, best is spring & microphyllous a shorn soul boart. Aome large tratches of grans. former hills à patchurch of shifting cult. and Thom finest! In valley bottoms famarea, etc. and came fields. Forage graduy Hills and more and more correct with then frest, little cleaning. Blioto in valley botters of can field and than four

May 14 - short auto trip my into hills on Hills completely denuded except forthin strips of many evergeen frest in raving bottoms otherwise covered with a savanna regetation of curatella, Byrsoning, etc jurdely spaced with a growind larger of melinis. The brusher become more sparse on upper slopes. The road gres up from Maracay overan alluving fan of great boulder. The hills are granite. In the main rawne the prominent tree is anacardium excelsum, Mangifera common also. farmer hell, heavily grazes covered by scattered of trees, a few sacti. Thickets un ravine, Tree mostly Eggeen. In places lowly story is grass in places so a more or ters microphylloms 3 samb. Villa de Cura -Julying pattern very conspreus on hills, shot savanna,

Gos monos de han Juan (Lan Juan de los Monos) striking limertone pealer! Dry savanna on surrounding brills of mica schirt, Leverely 1 burned some fire mans 5 photos of monor and savanna covered hills. upper sloper, below elift, of morros, bousted. near him pear the savanna slopes are less mae luxuriant, but typical Bagasining Caralelle savanua Thickets in ravine bottom incl. large trees. Spondia, anacardium, Mangifora Gléricidia, Cecrofira famanequete. lit fan Juan, turney last in a lærge valleg some relief in bottom, this covered by savanna. Flatter places cult. Bananas, nangoes, breadquent Former slopes with savanna, thickets of acacia othe lequere, Gundan, Cerrofia, etc much of this newly burned. Erring severe, then love hills will somi-desiduous serule on scrub fred or open sombford.

that are avorded near tolige Coffee plantation, in valley bottom a lower stoper much Janana cultivation. Gradua locally abundent. Former fills with tall almost closed deciderous sent. also badly burned bull Considerable area of this but with patches of grain In place grear cover most of area, est on steel sloper Caratella with it beally Aloter about 45°. Now in drainage of Ric Truy. Desiderous scrub and scrub forg nests hanging from heer, made of heige thomas. Gallery frest of large avoked the in raviner. Muntingia common. Coming out into very front valley tills have decideous freet with some Cereus. Valley rolling and largely cult except rougher spots. frattery tress and ledgerous Charellive.

monte near · 100 currare del Tuy. stony ground. Thicket in depression vider depressions with out. Aan Francisco de yare a large low flat area of minophyllous angia: Rolling lang and zone hill with bas deciduous forest in palcho Some cultivated (fallow) or bare pasture Inomeliad in bare beer. They more relief and hills mostly covered by low deciduous frest. on left a freat valley bottom with cultivation. till with deciduous frest on other side. Jone savanna on weling ground but from it by a fence. some low yet with gather windely spriced large spreading clacidinous fanta Teresa. Crossed Ris Try

Bottomland frest decideos, or semidacideous. Then rather steel migged hills with deciduoles freet or dec. semb, everyeer frest in bottoms of deep ravines, est along this Truy. Inga! Cicrobia Prosopie ? Hills and trees fundia. Hill are much burned, some leveraled of trees. This was end more on we go clown we. there harbeen no Curatella savanna for many miles are mostly have, grassy or the grain only a few scattered fairly large trees, and thicket in rovines. Some slumbury on ned seofur. Crossed large tributory. left on hills otherwise few even scattered trees. Ochumo except in gallery along navins. no, moderly, the bills are somewhat green, from The at least formeron meanum

floper now with green thicket. Mungl Ochrema Cecrobia shopa Sertie, fring a fairly good secondary fried with this rendergrowth Heliconia, fantana, Piles, Cupatorium of odnatum, Vernmig? Gleichenig (Ricse) Mismig, large aroid, Miseanthus- like grans on many vines on larger treesthat are reliet, of older friest, not on the achiroma or Cerropia. Intolies of gyneium / must indicate sleepage) larque nacional de quatafia fundant - for alperdal Truy. Montane rain forest, nather degraded, but dense and luxurant. about 800 m. I rot rainfal + 80

Down from here,

With mortane rainfall.

Much balsy on left slow,

less disturband across

raving on righty arrung

a men sperofelingtic aspect

as we go down but Compia

and Ochrung remain common. alorte occasionel, Israny vines. Itills begin & be clived and grany, Cross Rie Truy. Crything prephygiana shading cares o banavas. Much quadra, Inga. from the trees in shade, too her records fact in broad valley alternating with barrange potethe with some shade hills Cocas blantation on flat ground, gyneva Out into rolling aventing partly in grass, patche of word, thicket, cult fratcher, patches of Thalia genzulate. Crossed bridge to main Kighway. Hells now dry or grassy. Carraqua. Train hill with grove of scheeler. Throtiets with Triplania americana. tells become more and more wooded. Erw rolling land

grany with thickets and Iscattered trees. Hanging voit of a trouger civered with spine. tills facto west have many fires. Many burn scars along wood and in nearly hills. Mixtur of thickets and ofrewings on willing hills. Gypnerium along streams and in wet spots some is bruned. gradua also. Bardowski was here 15 your ago and it was unbroken rain fruit. now completely degraded. The acro 80-90" roundale Brad & Higherable & left. accinqua hitchardis pairties cult. Tabebuia of pentaphylla (in gl.) as cacas shade. much cacastar. Bananas als. To said on crastel plain degraded vegetation. cult patches banance. occas, swamp with gyperium, Herroma - more caras than anything else. Arm coconuts. Much targled thicket littly achards. Han Jose de Ris Chics.

East on coastal plin a complex of Thicket, large trees patcher of banance. of secondary print, seen cosonut trefer, vice Roystoner Capparently spontoneous) Crossed riner, Then some open areas, mostly growing my to spubol ranging heights. a little cult, some rattre plantations gradua.

Gyneium there line
watercourse. much Caroo treatly breadfuit large g gellow tatebrie El grupe. torent increases in proportion existerand but is being cleaned napidly. legaryna abundant along road. mostly sesondary bushy tome degraded primary teheles commo also Implanis tion bolivela corally one of dominants. then country becomes mon dissected, but not higher, Vog is an Am

desidures a temir wichm frostrouth a along Then a von large, flax scevarna of blinse grave and reathered lang tree, partly evergery Charmania I partly decidors (Helious (M). Then bills with decidence frest Busens, etc. Crossed min, were worn Iny wooded Title and. or savonna on lost, milde Then weight but distang and opposently gor a ris cocquet martation. Then hills and flat covered by deciduous sound frost, when white langled, somewhat spiny, some arboressent carty, Bromeliads on ground, some Tillanding usnevides on some trees. Photos of general aspect and close up (born); on crail and bet Culpina and Boreado Johne. Prospis, Cassalpinis coriana (dividini) with exiled port, beer bus, I rosofis lengthy lominant. Cacti, of Opuntia, me abondant eastward. a low

archeel glaveru Mucie of o fruntes with name and large lagurn a board gove with no vegetation around this a narrow to broad belt of Batis, In this some scattered avicennia. Locally Cereus st. (columnas) growing in Batis flat! the arricenning is outside The bare zon. high hills wood with the same frest. the Trapilians saythi white brest looks like cacetraga of ne Brezel. Intly other slope of the helly stretch more or langular, Cerbafira semi-decitions semb bred. at the base, on flat country, decidions serub front again. bur extends for some distance, mostly over true hills. Tree generally white to gray. Locally

gran where prosofis dominates, but this is largely along the road where a broad stip has been cleared, feithers green trees in the main body of the boart. Farge flat area, still dominated by this same fresh but with perhaps mane overgreen tres scattered in it. Occasional enge aren cleared. Calotropis common or bare cut, and bunks along road and pipe line. 7 mm-off to Purito Pirita.

a sand blat behing
a very slight beach
avery slight beach
ridge of greaty sand, fine.
Few plants:
alternanthers
Calotropis
Cynodon dactylin
Prosopis ef julipling (postate)
Therpeing populneg (plenty)

places.

May 15t - try by bus out of Jusepin. I surmediate area of Jusefin has scattered who but few trees, grass grass grass distribution of shrubs very uneven, becoming more conspicuously sportled as we progress the sports becoming open sent in

Gerarapishi wooded with a complex of thisbets of mostly decideous (perhaps about 70-75 %) trees a should, and savanna and open real patches. a stender upight bamboo is very common-clumber followed this rive valley for a time - to be Toscana there are various small forms in the ravine and outsliest.

Beyond In 7. weg. varies from

thicketo. Many small farms

along road. Galley freest

along watercourses & ravines.

Then considerable open plains

grassland with mattered

shrubs to open same and

Considerable evidence of

burning , some recent.

Photon if

with only ting anatella, Enomores area of this with very widely spaced tratches of wood and very occasional isolates trees, with much fresh burning locally, Crossed another nives with fallery breit. abundant Everatelly not more than 15-20 dm. tall. 1-2m apart - becoming less abundant as we go but much on horizon.
Then a large "marriebal"
Stopped here. I occupios a depression of several in lefth, muddy in bottom, the palms surrounded by a muddy area of rank herbs and suffrutescent herbs to 2 m. tall. Various sedges, Aboya fudvigia. melastones, grasses, etc. fouth of this a wast slightly rolling templetely of on aria, no trees even on the horizon. Tiny Canatella abundant, 1-3 dm. Call generally

show yours, some fresh bins.

Then an area of shoul savanna with shrubs 0.5-1 randly 2 m tall. locally dense some. forminga mosaic. frontibe of open marritia, then dense morielales occupying a considerable area sloping down to a depreising with a grassy Rio morichal Fargo. On other side of this any immediate escarprox of at least 15 - 20 m. or more On top of this more open area with abundant dwarf curatella. Curatella slightly larger outside the Gense, along road. area completely open - to great several miles away or beyond the horizon, then a small fratch a two closer to road. Recent burns with dead curatella shoots. Some small finds but mostly in artificial pits. To right no trees as for as one can see. On legt a frost (galleng ") on horizon. this relation extends for some miles. The "treated" ark

Bracle capitata instuding Viter Derminers, * various secondary spocies surrounded by a zone of annamation with its leafy surface slantes outward shaded from almo by the frost trees, with little or no grass beneath Them-Doubtless shaded out inway but persisting on edge. Deing fire resistant the anatardium muntain itself and beefing The gran down, protects the interior more fire susceptible trees from fices. Since the mala flora is secondary, it may be an indicator of a former perhaps. Perpleusould have cut it and raised a cropy rof com, abandoned it, and it would have reverted To secondary burest, cleaning former frest putch.

a river are some goods of water also water in bornow pits indicating that the water toble is very near the simpace at least locally.

not for south, of the Milain is an extensive area with reacted large umbells craved trees of various species, probably reliets of the former frest. In one area these are close enough to form an open is semi-open frest, with much bamboo this may be similar to the original brest of the region.

May 10 - Jusepin area - the
supper tomaces are principally
covered by creatella savanne
the ravives and slopes
by thicket.

In there west in
main road toward he ceibs
In valley bottom was
Jusepin where fourt is
toplated by thicket
the thicket seems to have
a much more georphytic
aspect than the forest.

Mack up on the terrace said to be "Lower Llanne"; Curatella savanna seems general, but the Curatella flas apparently been cut at some time in the past, as it is mostly not more Than , m Tall, a very locally taller. The grans is generally a bunch- gass (axmofus ?) 0.5 m a usually less, tall forally recently owned. abundant patches of Hyptis suareolens with dry inflorescences to 2 m. seem to be in upper slope, ravins. Here The Curatella and Byramima are much more abundant and talle, ranging of to 3 m tall? with very quarted aspect. Locally close enough to be so called open sent. tarther down in ravine is nother low gallery frest. The scarp on the smith and is steel and abrient, but rather dissected hl lejera Ciratella savarra again. rather low but some shouls

to \$ 3 m. the goass is quite short, selden so em. Thoma very large area in which there is only to an oreasing ting plant of curatela. mostly short , furnest off grans blowing treated refiter that, on south wish of way more or less normal savanna, or worth side no bushes. Then a morain of treated and untreated land. They large areas treated, or at least, free of bushes. Then areas that are actually open serve to the offen semb fired Stop in an area of stren sout frost. Here on slightly sendulating sandy ground is a morning running from an almost closed growth of Curatella. to 5 m tall with an understry treating of Croton locally of Caslaria silvestis with some admisture of ganthoughum & several of the showers, to seen open sunt frest of same composition

but without contin on) locally with it, and sign with some reathered grass Tanopen soul of which is a fire - resistant. in tall are Curatella of very good size Cychlosperman andmanning Vitex Banthoxylum Kandig Pudium Carearia roll. Crotm Genipa In the open casearia somb there is no grass, net the bases of the Thinks are channed. gooply annuals on gooply tes provide fuel. bottom of a very broad as we get back up on plan their are disturbed outeropping of indivated laterite or aslecife. This

is not a continuous evit, lying on a gravel with much ferriginous matrix On this is short years will scalled Ematelly buster. This plana here is very much cut By navines, landscale red. Different scarpe show diggerent degrees of inducation. On plain are tracts of large laterite bouldere half buried This changes rapidly I an ungullied plain; short grass with rather widely scattered rule large Curatelle (2-4 m.) (Badowstri says This grass nove reacher may than an upper limit of , in. in growing season to now it is to vo en. Ernatella soon lecons more abundant, then much less so or almost absent over large and fine small outcrops of Laterite. & Terrain slightly rolling.

exicapt for Parallia, which is common and Ceneus, Torich is occasional. The opposite escarpment shows spectacular top are rounded gravel bills, with convatella javanna. Esterite exposures near tops. then enoded gravel similar to that is bottom of quebrida, but greening freshafin more spring. This changes to an open minghyllow thon send or sand frest. Then, barther in an almost alosed forest more in less minerophyllos with Bromelia pringula on ground. Statiers about 8-10 milli legum. issons thorn somb fourt. and with semi organ tendas. Undoshi says liss rain in This whole area Then where there is savanne. Need a certain amount to formed grass for burning, Overgrazing can also to change savanne to semb.

gradually climbing Through than forest, then so a pain covered by them some soul Brigail refinery them Continue they microphyllow Thron fred. Learn still to be climbing. Out installations throughout the area. then prest voice from open to closed, much Porshin. Then a few ofen areas large trees - prob-artificial. Mostly than sout a forest very inequalor. Pereshis is commonest tree, -usually dominant. Then ancico. South toward El Tigge through thick than foot. operational clearings along brighway them forest steam changes from green to leafless and white, or slightly gran. of um free midd, but mostly Meduras. a few Coreus. Many wind, some climbing Cerous! forme areas destrully. Centaria Jame semi- decidences to deciderous frest, locally ciegraded.

an Tops of melling tills great opens for To savanna, is lover spots it is thick first, green to desidnous. Then an extensive high plan with very open sorom, with very widely scatterey acoura, curabelle etc. then thicker Curatella pavarna, Then moraic of more ofun and lessofeen Curatella savanna. Mauritia scattered along a strallow ravine. Rolling flat land, mostly very ofen, but with desiccuting depressions Vast sandy area with almost no trees or burks. Socally more should. in shallow navino the tree are closen togthe froll river. then were ofen grassland with fow busher. Then alrest none for a distance. Stopped at a slightly rolling area of bunds sety sand firmly compositely. over which is drifting a thin layer of reddish sand, partly erraing ground

1 holos of this showing tufted outbostylis, a leguminous here several of grains ordered from smost of the and 20 there is a patch of Bysomerona toward the top of armill vise on top of which there is a small Inow fit, which cuts thru a i ft. yellow selt layor, very hard, over q layer concretions. Trashypogn asonopris Vandropogo + Carearia aristida in the area when the Pryrsoning / forms a scattered where layer there were buchhot nothe surface. Junface is hard. Here the tena is a but different, with Rynchospora In bunch pass there are a number of legunes Cassia my Gelastea & spy Stylosentles ropy or or Passiflora fridada

magas Venezuela 43 1964 may 15 - 2 hm. south of maturin in open, treeless grassland with sprouting curatelly the crowns. 145220 trandropogen common in patches florvers small, pale 21 Stackytapheta occasional procumbent; flower 22 Hebisens Pavonea cancellata det. Frygell, 1977 hight yellow, maron center. orrasimal blowers blue. 23 Buchnery occasional dead paricles to 2 mitals; 74 Ayhtis of surreolens very armatic. very common in patcher flowers purple. 2) (comp) Centrantherum punctatum Cass. - Robinson, 1974 occasional 26 Desmodium Zornia marajo ara Huber occasional erect suffrutescent her, der. Stagermark, 1980 27 Weltheria americana to 1.5 m. tall; blowers yellow. common 28 (legan) common in stiff clumps 29 andropogen common in tufts 30 andropogos common May 15 - about 5 km, s, of Ris Tigne, about 40 km s. e. of Maturin in marshy ground in depression around a morishal or grove of maurita mino.

monagas 19 crt Venezuela 47 46 fleshy, not very tasty. 45242 Simaniba glanca 4 43 Curatella americana dur Stegument sprouts from nost evous that reaching surface of ground 2 44 Ochna viratea grossourdyi stryumands 1980
occasional at edge of
patch of frest slender shrub 3 m. tall, green blowers yellow. shrinks, reads 4> Isidium of frest. flowers white fruit immatus. shoul am. tall, flowers 46 anacardium occidentale C. reddish fruit immalure (receptable acid - sweet abundant in savanna forming a narrow best when mature and enlarged) at outside of frest shrub 1.5 m. tall, 47 Bysonima crassifolia (L.) HBK flowers yellow, fruit green common in shrub 1 m. tall; flowlite, 48 l'sidium guineense SW. common in erect lastiferous herb 49 (nidoscolus mens Arth. to 1 m. Tall, flowers white; orranmal all seen dead, certainly 50 Cragnostis abundant between an annual. bunch grass flowers white! 51 / sidium fatch of frest in savanna lactiferous tree; flowers 2 5200 (apr.) white. rare in patch of Greet in savanna

monagas - angrategni 1944 Venezuela 49 48 tree, fruit green. 4525 3 (answard.) Connarus dur Steyemans, 1980 occasional tree sterils. 54 Correlation occurimal May 16 - west of mate to But on shighway, near book & Tomag, mon agas in open to closed serub 3 55 Casearia silvestris swarz shrub im, tall, stem corby, chaned, abundant in opening, flowers robite. strub 15m. tall flowers 56 Pridium quineense SW. white. shrub im, talp. 57 Croton abundant in undergrowth small tree. 58 Cochlospermun 58 a Sa Panicum? Attenum comse fa Ceila, may 16 - 2 km. e. of fa Ceila, Est anyontegui eaten by cattle. 3 59 Strychnos ! Jendleri det skeyennacht 1280 tree Trush spiny. May 14 - La Ceila, angostegui 60 (stere.) strub 1.5 m. tall, plowers bright purple. a Croton strub 1.5 m. tall, spikes pendent. abundant

Est. anzortegui 53 Venezuela 1969 52 same - on hard compact spellowish of silt, with abundant "buckshot" concretions caespiton, dry. 3 Common rare, on bare soil sprouts from burned 1 75 Palisonias rigida off root crown; thys and corollas yellow, fruit green. leaves very stiff (L) HBK should 1.5 m. Call, 76 Byrsoning crassifolia fruit gream. common locally may 17 - about west of El Tige flowers yellow. now on hand crucked clay wilt with sparse grass May 17 se of Cachilos, headwater, of Rio guere, west & El Tigre is on edge of gravine cut in savanna covered plain rigid shrub 1 m. tall, 78 Oshna receptacle red seeds goes. tree, pods reddial orange. occasional 79 Coprifera erect, stiff, almost leafless 80 Ranking? shrub i m. tall occasional on bare soil to p. 70

Talisia my shinady

bowli

dividivi

guara ivenit

grapebriet

quarabang ficaris,

Jamand

Crumaning

anarahum

musuma

ehens

Palata p tribada pomote whi dulu

Lan Trono -May 17 - bus tribuil Tagre -Valle de la Paseres + Calabozo Principal street Tree are Thango, Casuarina of stricta. Delonix. Mangos are ripe. (man from mere grands Co. say all savannas are burnel at least once a you, some (wonther times.) Ett of hantone Constella savanna ther a morrished along a El Torre for Torre West of this extension Crentella - bund gruss savanna, but with a amplicuous reddish sand Larger between the burches In market - I Tige strong beans onions, ying, potatos calling, belipeppers, cumbo, cants beits sweet potontos avriday an assistment of squashe (c. mex) tornatal egyplant Vigna Cylindrics P lunatus Teans, black, full weam, How, hunts

chilis melieras livres many

Franttvinn? ginger, papayor

peanuts coffee son sungres mangres maine brancinas, mangres vian spandia, sience, bien

conlighour, unemphles, ohre

a medium size pear straped thile is a small fredering and it is x string beans, avoids, ingo " Large totillas of manure called casare, up to om across 5.8 mm thick Interesting that the are very few mangres for sale - perhaps reflects this there are so many produced locally and available In the talring transis smallseiles

Motor of some of spechles "product

West from El ligne -Curatella savanna on a ned sandy soil - The red sand reaching a considerable thickness 1 m +? judging by an exposure in a first. the Wishows the marked setty material blocky white in Leveral low small hills, covered by imeretions. seem to be old evosion remnant rathe Than duner, even Mongh shope is that of done some may well be dune, others have laterite outersping. I nees very share to alrost excling.

stop some mile we of a Trans in a low silty area of culatella servanno - the Ciratella rather irregularly dist. Finished by w. roll. feathered low rounded Joseph romant, Linux.

Smewhat evest of the The road shirts the head of a great navine with ned to maure cliffs, mostly swooded, but some gentler Photos, grassy tant by m well. Oprute an assortment of tree and shrule,

West of the the savanna thickens of to form an opening even to closed scrub frient and in The other direction to savanna . The grass is more abundant in the smore open end of the continuum, scarty in the closed part, when theo tend to be shows. levain becomes most rolling. word quelies. Garraguan aspect becomes suddenly dries, relief more sharp. (hen opener again.

to could more a less tylical

Crinatella savana, more prevalently open forest. then, suddenly, decidious Lavanna generally varie, between not sowoning and open forest, grass rather general.

Alofin savanna of Curatella, Bowditchia, 1 Byrning crassifolia, B. corrobolifice Roupala complicates Pridium guineerse, Caroaria silvation, and bund gran that is up to im, tall Appaintunia rufa. The trees here are up to 10 m, tall pulates 10-20 m, apart a mane. futerite crust apposed in navine (sample) shows striking accretionary rings. these may very well be result of altornate witting and droging. Form around willer of frincly mottled gray and from clay:

tailber west the willy Geenves sk me dissected and vegetation become more and more ac decidness sent forest,

but with ore, green trees. Patches boar recently been felled and bruned. Live is open enough to be savanna, but tends to have a more a less continuous decedoros shub lager. Thoma fine Copernicia seevanna eville Hogran and locally some other trees. Where there are mue other trees grass is derser. Patcher of the galm savanna are fairly abundant. Interspersed is open deciduous sterel or fruit, totally tangled deciderous Thicket. Then misselfly for Chan freet and thorn savanna. Copernicia savesno with when dant grass up to , m. tall. The palms in any me place are fairly uniform in height. But from place to fittle range arrowing but more in other veg than with Copernicis. Much regent bearing through all this country. Many glat topped or untrella avonned trees, but not very tall.

They more Typical Constelles savanna but with fairly large trees. This gradiely closer to open sombfrest and leven breally alosed soul fresh Rovines have galley fait. Much more Coperation savanne Then decidious a semideciderous open fract and thickets. Palme (Copernicia) this whom in "prim savanna" the Copernicia room to be much more even in height than when in other regitation. Forest tends to be more decidnous and bane. Then extensivo open Copprision + grass savanna. One area seen where all fralms were under in tall. ftof enet of Santa Maria de Gine en photos of savana or gently velling land. very extensive, not much frit grass under the fratms. Then good decid upus forest. 15 m, tall, open to closed, peatities of them frest on sent Patches greever than

others. Tagrafire - Deciduos forest, more a less thermy Coppeniin seeds. The Copernicis shows vains narrowing in the trunk. See Varetchi grapes. Sto Maria de Hyrine. agrod bit of cleared lands burned away. Fregulas decidor mub tetra This locally Thin, out To born savanna, which then becomes locally savanna, boully dense to fun thick. this get good green regun and Them thin out becomes mixed didner front after many donderou and mand on the on my nembers of small and and desirating frools. gradual change to a very notely soavaina with dy grass halms is nost of both the savanna bushes and tres de sourtron. These get bothers what grass between, then close trajether until a transfer of white me and mad cintures wentile they is a continuous, locally open, to reduce souls

flatens increases til it is good decidency freek Wenther is a large ones of grassland on it ride hen in morrace of savager attens havanny and obcidures for, then amostly savaina landscape, on rathe, rolling ground, then valle de la Passena, forme cultivation. Illen mosair of deciduous gnest and cleared land that assume character of savasna, thente still remain on some of it. This seem to be a broad and extends a good distance. The soplayllore than served may come in whom decideous prest is destroyed. the deciders forest varies from open to closed is about 10-15 m. tall, has a should laye serve m. tall, also deciderous. Then fairly optensing deadrested scrub, Has been burned recently in verany places foothered Copenning and. Considerable claving and

burning, first heer szalterell in scrub unas. then grans with a few scattered trees in flat low ground, deciduous brest on helle a escapment, at Picapica. This is south of road, Thom send north of it Doubtless Wen than scrub on both side. a frictinesque arborerent ceiers appear torally Then arens of Copernicia savanna sudrounded by their semband thickets Ame low hills and much cleared and burned land. then rother extension grassy cleaning. Lord offen thorn recent and closed deciderous front. Magua rama. Masair of deciderous facit and clearings ther romi-open than sout with scattered large, mostly deciduous trees. These logally more abundant. By Fotally large clearings. Some of these unraded extensively or Calotopis. Whole cleaning than frost,

me left side. Photos Levere enough that few smaller grants couls ours, but the scallered trees probably not damaged, On other side a sound grass pastons of Panieur maximum, with ame palms a few other trees. along the road are such cleaning, mortly recently brenned but beyond a couple of hundred in clasidnown soul, or frest on places reaching road. More and more along mad generally The serve is 2-3m tall closed, with seathered trees The cleared strip along the road is a frequent feature Runal cleanings with slumps are common. Patcher of good freet with flat topped trees about 10 m. are common. We other phase appear to be degraded from this, or in succession, if not actually cultivated or mareagel as pasture,

then some low willing but with fatches of desiderous frest. The cleared part in grass with southered trees. much oursel land, Then flat grasshand with scattered feat wheel trees on one side of road, tall scrub with similar scattered troop on other all decidnous. Cattle grazing in the grassland. Several fronds. then on other side, much Surred Land on south side guinea grass pasture. Broad burned strip on each side. "atelies of taller freix, tending to be evergreen. mally gallery fruit along ravines. But some gainly tall decidnous forest in small patches. much tall them serve scattered true and fratches of front truned areas and clearing. The thon poest degins to show a tinge of green. Large alon of mused thorn semband desamons

front. from small rise at oppour that the deciderous from characterryst by a very gray hom color extends a long oway in all directions. I I've aravie in density and proportion of trees to showing shub from a 3-4 m. story generally, closed. The tree, larray be 11-12 m. tall, Some Copernicia scattered in it. We seem to be gradually climbing, but this may be an illusin. This tends to thin out and become more offen, cerough other wise not changing much. thickers up again, with a few more green toes in it. Valme are fairly common. Locally the frest looks about half evergreen. many rather offen areas. Inthiseast side of a low range of bills the evergreen elements seemed to increase in proportion, but from top, the front as far as she could see in tragood bestance the

Thurson togod this a semi-

deciduous and to clayed thistotyprost then a seevenna, that approaches ofen frest, this remi-deciderous La Encruciado. favanna with abundant trees. Then wounded gravel bill with sern. decideray scrob, then areas of approximate & savanna. 7-horny. I cattered flat topped treas in scrub. Copernicia common, Shrub- savanna to offen went. The commonst should in all this oppears to be a microphyllous acacia. now a larger leafed green open soul alternative with savanna how Byrsoning and some Caratelly also Bowditchia : Lavanna and patches of "mato". favaror with trees To 8 mitale or more; thick, grass where not reently Surned. this merges into an open never closed and tangles scrub frest. Then ofen savanna with scattered large should and small tree, inequally distributed.

Then some cultivation and more open savenno. Rovines and disserted land are frested, Thre den serul; then Idranna, We seem a be following a flat topped wide wide between two disserted, woods avas, on tol this varies from server to savanna, to grain savanna to grasoland. Falms mostly very short. Brademont into an extensive of per navarana. Constella Byssoning of all sizes. The Trees and climbs Deeme von stare except Copenicia robida beennes very commu. Then small paldes of served. Then so then so then so then so then so then so them so the server of gran with swall Bysonims. Pattsher of larger one. Word, Jelant become very represe og, local areas of grown. On right a more wooded area slopes down to the reservon. Un lift inequelar notter clumped tress and shrubs in grass, Rother weguln savarny continues for some distance

flapped - the laterite in largely a semi-versioned mass, but has granted considered in it. The sebered part is badly weathers, surface is black beach of many restances, common her,

May 18 - bus Tip Calabago south to Sav Fernando de aprice Conatella - Byzonema savanua just out of lown then gallery bolest where we crossed a rune. Rice fielde men a very large men. Trees around devellings and scattered elsewhere locally. Farge inigation canal; with marshy strots and fromely along road with Typsha, etc. road, the other two at night angles. Rice seems in all stages, from fallow to headed Weeds splanting from mid-December to may Helistropium undium Cleane spinors forfacia dulcis Reason for only, crop a year is that between crops they just cattle on the land to control the weeks. Doneria verticillato Lista of (white fr. printersh ff.) Portulara formeripero fida acuta I have to lathy indly Activity of the form

Eynodon dadylar alternanthey produmber, malashra of aluifolia aeschynamens (urners of Cypiens of Paspalarn Omaranthus These allin barngard. m nice fields proper plates Echinochton of colonis is principal weed. there are many weeds along margins and in detales Cassia tors! (long pod) Elipta Englishin of glim. Cypens spp. Sudwigia (soffer) Hyparrhenia rufg Stopping

Rice is harvested while straw is still green. The markine chips the straw and it is left in the field. Cattle are turned in after harvest.

Poles from Copernicia an used abundantly in construction.

17000 hestares in vice project much more.

the south - some large trushed reathered in fields. Delnix in fields bloom fange trees whe abandant southward quiveralso. Cultivation less interes Other crops than vice locally. Much more fallow rice large to south. Much newly plaved land. Then cand turned left. Beyond its vice on left cleared land on it other crops bor a short distance. Then pastere, threshet and palm savanna.

Alonged just south of limit of cultivatrus. in an inequally thickety vegetation tree to 15 m. in an open freet aringe ment but with thickets Tangled with sumbler andwith grassy opening. Copenicia common, It fint dense, cracked in blocky. grazima commin. gaeralfinia of emany Mandia 1 mg. Degreenia (amm) Ptopones

anderia Pterosarpus moredially soull is Byzoning savany only what grant rolling Terrain, occusional thickets. Then some clearld land. Openforest of Byraning adjacent leaving. Lemo ofen grussland, some scevenna of palme and deciderous strubia small trees, fine tangled open to atored servel. mortly inequen savanna. Then more inequalar thickets and offenings where. Many cattle evelywhere. Irrall farms. along this road are finde soo weerlying borrow fit. Many small crocodiles. teathered small patches of July savanna. Then Cairly general palvi savanno with thethet locally. Upen desisted low ground with thin gran of scattered trees, some featings Thickery savonna, local fratcher of closed Tangeled scrieb frest, frob. decidnous.

hood.

Large ofen aren of very short grass, with fralms locally what appears to be gallery frest to left at varying distran then savanna of palms and men minoshyllows shrub. Becomes taller and Thicken. Palyon locally very abundant, l'atteres of Decidions, The Palmi very about davit. bregular fratchy savanny fairly large trees. Iso mermer open - large aron of grass with few busher - frest 1?) in distance. Anne bother of tres, but very large aroas without any. Very short grass. Then forther of polon. Continuous party sacrama. wather welgy la locally with everally without offer trees. several bon photos. a bet faither south. a stop on border but jalm savanna and esters (submerged areas during to wit reason) mo has wear

The estero soil is deeply cracked, mostly box but withment very ofen mat of reptumb 24. ? " two or three other very prostrate species (Vincetoxucum 7, 74/100022?) and with widely spaces Heliotropium undicum giving the character of the landscape. Slight megularities in ground no essential difference in edge of palm grove except surface my inequal feveral seedling palms in cracles On other side of road gralma a stow everly distributed from wetter from 3 to 8 in apart a few spring and and many mostly dry herby. covering a good part of the ground ground very ouguse with cattle trailer South the osles is on both sedes but ascamagnan forterments is approached I fandscape been showby and with exallers trees & cult.

Then more low kying lova but with rectived trees, grassy Tees This much disturbed, many maly farm, many shallow fund. Then an saterine green grassy landscape mostly men but a few heer and the pallery frest in distance The grave appears to be a course thing like Canicum manument but later down to tuft, 1-3dn to John fords evenly. Hen thrishets and palm great perchol egets and moulet revision point along wati One grand covered by Salvina. with abundant comming Hon other green grass in flower. Indistance to another pand with

hundreds of soprets, some ibis, many anhengs Patches of palm & furity trickets. To pen grace with

Ris apure Large areas of abbarently cleared bottom-land with Lunge trees grassy was enel, freddigete. Therfaring flowing ceran ornamental at club. Dense low tangled freit along a dry channel to Road from fan terrands to San Juando l'ayan. Cold field! Commonest plant i pomoco crassicauli, Viresofis, guazuma, Sicavia, many broad-ley trees hand in largely cult. succept for depression. many large hels, tangled bence how wooded charrel banks, etc. general aspect is wooded. Banksonas. Many Wickets. These become more dominant. forge timasos abundant. Vatthes of dense closed

finant called "crlictar" I most about plant Earled " celigonia". The this hat to brome mino phyllows. a carefuture Backies. Much when ground, The ground belie is deeply eracled. Colceta's very tangles clased frest with and clave line in wet reason. Roadres leves. inspersetrable but edge seem so. Lacally very done and difficult. sems to be just clear secondary thicket bollowing abandonment after cultivation ingthing Licania Proposition . ust outside is a well with water about the 23-4 m down in fine Artument soil. Cleared freeds. Perstia well as living fever.

ot edge of forest is an antal flooring stender shrings glowing control strange areas completely open - low hard cracked soil. I somenated at this season by yromand to be inundated it man for you worded areas dense and tangled crossel by the open ground seems ly ho open ground seems slightly lower.

moth of Rio affects
are dense palm frests
thinning out to palm
carannas. Then more
fralm frests therefore areas
that large areas
of this have been cut.
asmall ferred pratch of
frost to is burning freedy
Patches of calceda,
cond cult fields
inouth the ponds with literally
hundreds of egrets a few
serval pends with literally
hundreds of egrets a few
serval tibises, avacets, etc.
integral small fish trapped
in the porters.

84 85 Much burning going on her. many of the fronds The Carragins. Why. Furned const lon dist wal Scattered Dange totes trees on left thinkets might, then posture m it also.

1964 Venezuels Est. quarico 87 May 18 - just s. of Proyects quarico, s. of Calabozo in open, tangled serve frest and thicket, small try, ribe gruit red. 45303 andiring versional sterile shoul, branche Randia in me plans. occumal tangled semi-scanded 3 05 Randia should, tranches many common sliff, decussate. may 19 - moly and of Estero de Camaguian in bare desirrated bed of seasonal lake. prostrato 04 Trichospira verticillata (L.) Baker - del. H. E. Robinson, 1974. to 0's mitall, flowers lavender or Helistropium indicum L. abundant, dominant fls. white, telantered 08 Helistropium ovalifolium nang produte, sterile. very 09 mimosa abundant, forming q disentinum mat sensitive, steril, prostrate 10 mimora orrasional 11 Hydroleg rane

1944 Veneguels 89 Est. apure May 13 - near da quama dan Fernando de apure, on road to San Juan de Payara in the tangled of recordary liang flowers white falling readily, in pointed, pointed, frest called "calcetas" 45312 bignon. Tanaecium crucigerum Seem.
4 Liang ad. a. Gentry 1974 small fleshy tree, 3 13 Perestria & quamacho der. Steyumark 1980 planted in cleaning almost spinelers. same - in area of sparse ofen serul called "calletas". shrub 1,3 m. tale, beit range red. 19 Copaifera Congans Connarus det, Steyermark 3 14 Coparfiers Connaus, det. Steyernack, 1980 17 (fcar. ?) Psidium der. Steyenmark 1980 showers whitish mund Sleumer 18 (flac.) Hecatostemon grazumaefolius (HBK) should to rim tall 19 Pillecellolium lanceolatum (H. x B.) Bent. blowers whitish, occasional so Pacillinia occasional shrub 1-1.7 m. talf. 21 Condia abundant

may 19
Estacion Brologica de la
Sociedad de Victoria Mathed
de Verezvela

Ferbariam of several bundred
shocks para Calabazo Region
in good covers

shows a layer of fine soil a few em thick cayer of inequaling & a thick cayer of inequaling Eaterite publicant about romand base vertical tap nort reaching at least, m, torthously bot-fieldless Brandling somewhat is soil larger,

alanger tree braces
grown superficient
wort system, reaching as
ranchas 19 mm from trunks.
The vertical roots and
mot too well developed, said
in In because of gravel layer.
but behavior in rand
should be cheshed.

Burned area has lafts averaging 1-2 dn. apart mediately adjacent unburns yers in closed, centurious, 1-rdn, tall.

Considerable accumulation of pebbles u surface. Lange blocks of Sateritic conglorionate Instructing when sungar slopes a title, unve blocks well buried in surface of the gravel lays. yest maps give age of material as Plastocene but van de Kammen sags prof. lower Pleistoctus or lower. much evidence of surface erosin and deposition. Little com windrows of load grass bragmont suggest sheet flow of most.

matar occupy hepremin in arreife surface, filles with soil whised non savanns shouls & trees y botos

one very large one mata is on an advinay profile without the depression which his one includes Curatella nowather his one includes the mosts has spread over an area of savanna when protected May 19 - Trif by our Calabago to what of Caloboro curatelly Pyronema Bouditalis ravanz then along the damacros his grained - below days is then grestin valley bottom above is a great reservoir, in which are large areas of still standing dead trees. Below dan several fronds surrounded by Typha march Reservoir is down about 4 m. from high water. The funds believe dans are benow pits from which the material forthe plan was taken. Sime of the one is souround, some with Copenicia y acreia or procofus, Some Curatella-Bogramina savanna admost closed other with rathe closely spried small trees. Reynd went of dans is thick curalella, perhaps open sout rather than sarana, then open frest to savany of Bowditchia, Curatella retermina nother short grass? Langue Me of well developed trees, to 5 moltal or man, vanit from Lavanna &

open, locally oloset, fret Then open By roning - Caralella savenna. grass grazed very shot frees to 5 - 5 m. Tall. Uniform vera long distance, locally Unibe oven thickets tangled with vines after some distance closed bust lecours general except where cleared, form regrowth from cleanings. benthis fred beenner lower and more microphyllows, Hato El Corozo. then talla again. closel, any tangles with vines. for then servel. Then grass with scattered copenies forally the palm are absent frally spot of semb. Lenain frecomer gently rolling and Than sout is the vegetation, spen to closed. then morain of day semband grass, with or with our copernicie. Lange ones recently bonned the Education Comes helleg but new mer appearing. meetine of decidions than semb and Expending, lin Expernicis in places, est mosthere are tall trees. Trees become enight, except

where burned, Then a great extent of open or closed, inequelar scent, much of it recently burned. fine anges of it with Copernicis, all of this sent and most of fred solms to be deciderous but will on Toward being leafedout. then rather well forest, love, more inequilar in places. forally openings with Co Jaconicion then thorn shoul savanna, dean ofen frost with Tall dry weeks. Tree get Taller, to 10+12 m. Joing down a very long gertle slow and the frest gets more general, more midply then then Inver, Rougher land on other side generally Consty with decidnow microphyllow trees, This run up I some low rocky ridges with Open frest In other ride a rather lovad valley will micro

phyllone frest. In redge and in ralley muit le monde monocoga Ridge on other redo has savonna er loseit on steel slope. Third noch showing Openfort in basal another walley will megulas frest-reins mester Palm locally. Dos Caminos. Deciduous from and serve frest rather morrophyller Helly country, we arresp by rather inequaly microphyllows deaduran fourt. all of this borest, from Calabazo, has been green, but unboubtelly deciduous. Now it is loss green, locally bank. weally it is open and grann. Valley with some flax arous which are cultivated, otherwise with deciduous frost & scrub, locally Cham serula. Begones more and more bare as tenain becomes more

belly, some hells bare and grassy or partly Parapara - hills are mostly grassy and brown, with or without scattered. Broad flat wally by ofen deciderous semb Hills now covered by open deid frest; closed in valley and naviner. Atream in ralley day. fells wary from open freet to savarna dense in navine. They hells to the show Typical curatella savarna, varying to grass without orce, - valley serul great quartly cleared for cultivation. El Manquito Climbing along a raving wooded in bottom, savaring Recover mue brushy toway Fundy farmeeta for thes. Aper sloper degrades and brushy, ended. Wooded in ravinas 15 rush on these slopes is

tangles will a great mascof lands horbaceous vines mon completely dry. from here & tolkonos. same road as described Spectacular limestons frinnacles and crays. Tangled seret and cultivation Cimesting Mills thirty evorded on who stopes shifting coll. on lower. flat land in valley cult. exist various gallery on river banks. a kittle water in rive. not sure that these peaks are live stone have the appearance also of remnants of a great egreous dike - very stranger sides, aronged in a now. Hills more savanny covered, in bare, filst valle, bare ravines evocaled. Villa de Cura. Rd to fant rancisco de asis. a rough seit al, they cultivation maile, case etc. no This morely led bash to highway to

102 1964 Venezuela Est. quárico 103 May 19 - Estacion Biologica, Res erve, men Calabazo, small island of frest in Constant savanna. 45322 quettarda elliptica Sw. 2 one of commonest plants in shoul 3 m. tall. 2 23 Randia shoul 2 m. talf. occasionalin 24 quettarda elliptica Sw. shrub 2 m, Tall, fruit dry. shrub 1.5 m, Tall; fruit immater, one of commonest plants in 2 26 Cording Chacoensis Chodat shrub , m. tall, flowers white. occasional just outside of 27 (rub.) Sinipa op. det Kukhide, 1977 under kuratelleg tree in sterile small plant. savanna san. in small clump of trees on deep compact mottled soil in savanna 3 28 Amilax vine climbing in bushes 2 29 Vojehysia venezuelang stallen sald to be indicative of steril tree 8 m. Call, leaves glossy above, this soil type yellow green. 3 30 Xylopia aromatica (Lam.) Mart. slender shoul, sparsely occasional branched 4 m, tall; flowers 2 31 Engenia mall clumps of scrub in white, fading yellowish. shrub, aromatic when bery common in chumps broken. Lavanna front in 32 annona chirimoliq h. shrub 1 m. tell. orrangemal

May 31 - alexander Kerger Memorial tanstray Plants seev Fagura and Mother tender benjer, flex ofraca mitchelly repens Rhus toxed adve Concere japane Botyphina my ginama Ligurdanten styraften, galium triflown Chimanthy organic Smelax whendy to Vadsphyllum pettatun Wootwarder or gives dusaera hip bythe Lonce a paparies athyrum files forming whether Carpine carolina aces within Lundraghan tulipupus Annihous ennafina Rubus of a spitus Anymphocompuspochibus Circum que best leste Platamen seedenteli Kanyardy Bothy shown direction Polystichen anostelnichen Grenny phellos Planthenseissus qualpolis

Robinia prendarash

Gleditulio transition Carylus ambiguanus Kliedsdendin man Lauren cermin Carex Fraging one many acer magnindo Viburnem dentitum Comunda unamono lex verticillata asiming bolat Tulot. Lilium queren falesta Campris radreams Viti Calrus Pettandra virgini Comes amount Evelimency olygonin sagetation asaven virginia, funcia offices Betula migna Krigig verginics Stellaria medea

Horded wable.
welstand
pileated woodpecker

but to toin

Show laner on steel north frame wall of navin everel with Rhododendron maximum, some Kalming. practically nothing on ground. flat byttom of rame deminated, inshrub layer, by finder, much Carpinus bankery Inground tymplocarfun, Circaan, lodofilyllum, Thus too. allrymus arisaema, Parthenocina Impatiens willeg Wemmstaelling become my years Streams of brown water on clean beds of fine gravel, his a large dried beare improvedment. abit known in on ofering with several very large faller Betula mayer Below thin a thicket of small

then alongs bearer dam.

Betula migran

is a fringe of barrenger. The water his high and the tot dam is in good repair.

On low broad midge between prond and meadow is then word Posa multipling. alternaring glechoma Ranceneulus

116 1964 Virginia Spottsylvania Co. 117 may 31 - Belvedere Penny Farm, Rappahannoch River 5 mm. below trederichsburg 45347 geranium molle L. flower puple. local in grassy corner of full May 31 - alexander Berger Memorial lancturing, Rappahannoch River, 5 miles below trederichsburg on bottomland meadow 3 48 Frazinus tomentosa Michx. 5. small Tree orcasional isolated tree 2 49 Rumex crispus L. erect occasional 3 50 achillea millebolium L. may while; plant occusional anomatic. 51 Diospyros viginiana small tree 3 m, Tall, occasional isolated tree flowers white, waxy. 52 Lepidium virginium L. erect blowers whitist. , common in thinner placer 53 Vicigangustifolia var. segetalis (7 huil) W.D.J. Kock enest, branched. poccasional. 54 Lithospermum awence L. 55 fungus hight orange common on Kubus sp. 3 56 Engerm annus L. rays white. occusional 2 57 Kurnez acetosella L. flowers reddesly yellow. Somming large paticles culms soldany, ascending. occasional

118 1964 Virginia Sportly wania 6. 119 45359 Lalvia lyrata a locally common 60 Trifolium repens L. flowers white. 61 Plantago lanceolata L. occurional 62 Juneus tennis Villed, orrasimal 2 63 Rumer obtusifolius occasional 64 Plantago virginiana 45364a Trifolium flowers yellow 2 65 Ranunculus bulbous L petals yellow. common 66 Cerastium seviiderandrum L. erect common 63 Glicha gleisma hederace prostrate; flower purple. very common 2 69 Bromus japonicus abrendant, dominant plant 2 70 Bronnes common 1 71 Veronica peregring sect 72 Myosotis verna mitt. common locally 2 73 Pog abundant 74 Geranium carolinianum L. 2 75 Oxalis strictg L. common

120 1964 Virginia 4499 same -mondy areas 45974 Denothera lacinista common locally 77 Carex widge of beaver 78 Juneus effusur L. 2 79 Sisyminchium common May 31 - alexander Berger memorial kanstrany lower snow Creek on bottom - land flats 1 80 Stellaria media 81 Viola 82 Fraxion of Tomentory michx. f. common 83 Duchesnes indieg occusional 34 Triodanis tigton perfoliata 87 asiming triloly orranional 86 Viburnum prunifolium 2 87 Renunculus abortivus oreasimal

Abottylvania G. 121

blorous yellow, turning reddish.

flower blue-violet; roots yellow.

forming losse mats.

stems event

very tall tree

prostrate; fruit red, fleshy.

flowers deep violet.

shrub 3 m tall (athers
much taller), sterile.

shrub; bruit youn.

122 1964 Vinginia 45388 Carex local a 39 Onorlea sensibilis rank 2 90 Festurg obtusq occasional 91 allium vineale L. ? 92 Trifagus virginianus ray, under beach true 2 93 Festing 2 94 Peltandig virgining (L.) occasional schott, End. 2 95 acer negunds c. 1 94 Vitis laboures? 2 97 Vibunan recognitum Fern 98 Cornus amornum mil. oreasimal Conydalus planulus 45 400 Viola rafinesquii

Rosa Krizia virginica

same - in lower hart of sleep north slope in words. 5 01 Kalmia latifolia at base of slope in very wet ground 3 Or Sencothing racemora

tuftes, culme weal,

steils.

culms weally assending

leaves strongly compress,

with sharp edges.

dry, last years plant.

ill-scented.

inall tree (other larger)

influenceme pendent.

sterile vine.

strub z m tall.

shrawling to accending

stems wealthy assending to procumbent.

shrub n.m. tall. flowers white. shrub im. tall

1964 Virginia Spollsylvanie Co. 124 125 45403 Rhododendin majamum shrub 2 m. talp. 4 locally dominant bottom in dens words 04 Englus americana Walt. steril should 1.5° m. Tall. 05 Kanunculus in wet ground 07 Lindera benzoin till: fruit immature. dominant in shrub lager 3 08 Plese verticillata nave in shrub lay 1 09 Elexopaca L. small tree, i'm. talo. common 10 galium aparing wealthy ascending. 2 11 Botrychium virginianum. 12 Botrychium dissectum f. obtuiged un leaflets reddish green. 13 Kanunculus 14 Jungus 1 15 Carex to Carex in wet sport 14 Platanus occidentalis Tell Tree occasional 17 Fambueur canadensis strul 2 m. tall; flowers rase in small opening 18 Rubustant in small opening canes light areling.

Spottsylvania to. 好31964 Virginia 127 126 athyrium filix-feming frubellum sachines reddish. very common 20 Dennetaedtig punctilobulg locally abundant 21 Kubus flowers white. z 22 arisaema tritophyllum L. leaves clear green beneath within, green without. 23 Stellaria of trubera michy. H foricers japonics Thung. vine, flower white, very fragrant. 25 Woodwardig virginies somme same - sides of raving young plant sterile. 2 24 Ulmur americans 2 27 Ulmus americana mall sterile tree. 28 Juglane cinery vecanonal 4 27 Carpinus caroliniana very common inflorences pendentor drooping.

1964 District of Columbus 128 June 3 - Washington, back of Smithsonian Institution. 45430 Catalpa large streading ties, flowers white, 3 lower planted lober marked inside with purple 2 yellow spots on lover love bendespurple lines.

Virginia 1964 130 June 6 - Dickey Hill, just below themandown Valley overlook, on thyline Drive in rather from second growth frest on moderate slope 45431 Over negundo 6 locally common 4 32 Vitis of vulpina L. abundant almydrice, climbing overtrees ! 33 Carex common in old trail 34 actionneris alternifoliq (4) Dr. occasional 33 Eupholia obtusata L. common in old trail 36 Osmanlinga longistyli abundant, forming a continuous herb layer 37 anchenatherum elatris (1.) Prest occasional on old trail (seen abundantly along drive) 38 7 naxious americana common. 39 Viburnum prunefolium oceasional Jeranium columbinum t. occasional on roadside en sun

1964 Virginia they, not. ark. 133 132 July June 6 - Redge Bet Skyline Downe and The neighbor on welly ridgy wills 45 441 tilene carotiniang breed depressed; flowers already faded. 42 Vitis is open with ledger 43 Rosa caroling with curious galls. common 414 (grass) occasioned in semin often place 45 Ceanothy americans sub-shrub, bud, only. 46 Carex common dense tuft, culm uncommen weals, preumbent. 47 Vite, aestivales Thickx. vine serunbling occuremas on ground and bushes, 48 Heucherg reupes erect gretal, anther crange. common +2 49 Vitis aesteralis muchy. wing, tungled on rocks, tungled on shreading colonies occasional 4 50 Comandia umbellata connected by and - like locally common subterranean thisyome flowers white. fune 6 - The neighbor, on and near summi, in thin val words 51 alliana officinalis andez. erect herb. 52 Carex colony on summit caesfutoso mommon

134 1964 Virginia 45 453 Caresc. occasional 54 asclepias quadrifolis 55 Polygonatum 56 Carex mal on slope common 57 Hencherg 58 agrass ammon 59 Rubus locally common, 40 Carese 61 Cares common along trail common 62 Geranium maculatum ommon of common 43 analis 12 64 fameula occasional 45 Galium aparine 64 amelanchies occasions 67 Hieracium venosum common 69 Carex mary many many losal on withy place

flowers pinhish white
flowers greenish white
part anthesis.

weng enect.

culms erect & slightly arching; petals white

Tufts culms weak,

prosumbent.

flowers speenish.

petal nos purple.

small and ing tre, fruits not quite mature. leaves red veined; flower yellow erect

Shenandsah, Arat Parks 136 1964 Virginia 137 47470 Vicis common stems weakly ascending common XI 71 analis erect, ylowers greenist. nare ×3 72 Vieia flower magenta. 23 Pys June 6 - Abryline Drive near mile post 27 on thinly weedy slothing NI 33 Pyrola notundifolig van buds only; plants connected by houghter buyones. americang small colony spreading warny. 74 antennaria common N 75 Between lenter common barls darls.

1964 Virginia Shen. Nat. Park. 139 138 June ? - Elle Wallow Shelter in somewhat disturbes ground in mixed decidures 45476 Viola triloba Schw. leaves erect pedicel emmon, especially near path 77 Potentilla simple micha. reasimal 78 Viola palmata d'. rave along path 79 Viola publicens ait. 80 Viola 81 Chelidonum majus L. ? sap red; gretals yellow, falling oceanimal sterile, fronds not ever. 82 (form) AthyRium filix-femina (2.) RoTH local in deep shade 11 83 Stellana pubera mich. fruting stems procumber, comman steril one erect. 84 Congolalies flavola 12 85 Viola long path common 12 86 Barbarea vulgaris RBn. erect. common VI 88 Dentaria laciniata Thuhl. orcasional Vr 89 Viola In 90 Oxalis common van Gilipes flour Salist erect, flowers yellow occasional

140 1964 Virginia 45491 Viola 2 92 Oxalis reasonal 1 93 geranium robertianum L. 94 Aquilegia canadenses 2 95 Vermina officinalis * 4 96 O scalis floreda Salich, det & 11 97 fantrago viginians local on var ground 11 98 Ranunculus nave along path 1 99 Ranunculus abortions L. common 45500 Ranunculus 4 DI Carez 1 or ansaema atrombens (uit.) Bl. 03 Osmorhiza claytoni common 04 Botrychium verginianum common 05 Carya of Ovata (Mill.) Koch

Shenandoch vet Par 41

erect, flowers yellow.

flowers nose ping.

sepals and spure scarlet,

rest of flower yellow.

prostrate; plowers

pale lavender lined with

purple.

erect, flower yellow.

erest

Toulme weak

beneaths spathe dull white.

tree to m. tall, cathin i pendent, dropping barls tending to expoliate bot not comsprenously sheggy.

Show. nat. Vary. 144 1964 Vinginia 145 wing of June 7 - Junny gray 7 mg 2900' Road above Little slevy stain 88 4 00 in seems - growth hardwood Desv. 45515 athyium? thelypteroides (Mich) common flowers white. NUTT. 16 Hydrophyllum macrophyllum common gretals white. Brite. 13 17 Sagifraga micranthidifolia (Haw.) abundant in wet soil below spring June 7 Jimmy gray Tire Road below fittle Devil Stains Trail 2600' ment in frest 795 m erect; evrolla greenist-born. 18 Scropbularia lanceolata Pundy common on road embankment flower greenish white 19 Surierla nave on road ent rather glavrous 70 Legustieum occasional on road out 71 figuration occasional on road cut. just about junction of Keyser Run 2000 570 mc Fine Road, 22 Vitis pine and hardwood forest large liane at edge of right - of -way clearing 23 Carex orrasimal proxumbent; fetals yellow. 74 Potentilla simplex muchs. common along road

Shen. nat. Park 1964 Virginia 147 146 45525 galium Triflnum blom prozumbent. common 1 26 Botrychium orginianum common 27 Viola common 28 Oxalis florida Julist. det. Lowley, 75 flowers yellow. occasional 29 Viola triloba satur Schwa common 30 Renunculus abortivus L occasional shoul im. tall, 14 31 Lindera benzon locally very common aromatic when broken; fruit immature. forming a should layer June 7 - Jinny Grantine Road, above Piney Branch Frail, on small tribritary of finey Brand .1600 420 490 32 Carex low ground near stream 33 Viola Canadensis V. occasional in low ground venstrem smalltufts common in low ground near stream glancous, culsos weak. 99 Carex in low ground near stress isolated culms or very 36 Brown how in mount 37 Cerastium common in word procumbent. 1 33 galium aparine Occasional in longwind

flen, nat. Park 148 1904 Virginia 149 tabels typ June 7 - Piney Branch, 17-10 Praining at edge of Pails, Thorston River land with hembocks and hardwoods. arching buch, puit green. 45539 Roza 19 40 Thaliethum herb m, tall, leave, glaveous boneath. common small tufts, erect. 12 41/grass) commy 12 42 analos occasional on wells at edge of stream flowers reddist. 1, 43 galium latifotum 12 44 Panisum mall ingy occasional 45 Thalistrum descum. nave, one seen. erest 13 46 grass 47 Vrola near estate of stream 48 Euphnbig' oceasional 12 49 Viola common nearedge of stream 50 Cryptotaenia Canadens nare along mod serambling vine 17 31 Rhus tracodendren L. common

flens Natitary 150 1944 Virginia 151 1400 4 libele IT June 7 - Keyser Run Fine Road, just inside Park boun dans in seems growth fruit leaves glaucous beneath, 45552 anisaema atmubens "L. spathy green. X. occarma leaves duly green 1 53 good yera pubercens with white veins. flowers yellow. 1, 59 O scales rare flower greened. XI 55 galium circaeyans 1 nay June 4 - Kidge to the neighbor, June 7 - Flats near is a round topped ridge intersection of Jinny with por guerun gray hay wad and fremen frest, here and Keysers Run Fire Hoad there werds shrub layer at about 2000 largely of q ilicifolice. covered by almost pred ground vegetation mostly less than 3-4don rother this near Blue Ridge and Vaccinus olbh. Could be an old vacellans and the plantation. Encared altreadant. Very little grand Fey so father out. vegetation. Thanse Vicia 2 Mg. very comman Parthenrismes, a frew Chantpudium standlegi. Klowy toxicohendron, little animber of Carecost. else but a layer of needles common . occasional outersts of a darle sandstone,

Frederich G. 1964 Vinginia 153 June 14 - 19.50 4 mis a of at corner of Lucas lend an area where kalming Jan hillor both of way i very abundant, but amade in full bloom till is finall outs-brehay and the second with young tulif poplar with the second sed merple, chestrut grassy aduly shale sprouts, much young I dach limestine. sarrafras confle much Sead chestrick June 14 - mits. surrounding (Jun left at bir station) Road to south som. everiney through a valley with mined seemed growth. umerram Road cuts may shaley. much aclaythe 1 Vive, est V. originars, ces fore over solven the being out for fully not of. Part Day Scrit camp and reservation. uling Kalmio in flowe Back Creek Valley, Hat fields in bottom are clearly and pastered, fruttress house and old hotel. W. Va bourday Shortly after y turned left ma small wood was, second growth toward freat north mo!

45554 (1)

Frederich Co. 1964 Vinginia 153 at corner of Lucas land June (4 - 19.50 4 mis of an area where kalming Jon hill on both will way i very abundant, but mail a large colony of Opentis. in full bloom Hill is finall out - buchary and the design of the with young tulif poplar. and the second ned merple chestrat grassy aduly shale sprouds, much young h dade limestone. sarrafras conflu much Sead chestricit June 14 - mts. surrounding Gore are densely fromted. Trees alia (Jun left at fine totalin) galla Gueren corcinez Road to south som. walker of hime through a walley with mixed seeml growth. fraging, umeriana Road eite may shaley Carryany. much agaither 1 Ringyola Rividending l'ine, est. V. verginars, against love seen south being out for fully wired, Premis Pines originians Robinia Betulo lenta l'ast any Scout camp and reservation. Kalmin in flower ferend itny Back Creek Valley, That Connus field in bottom are clearly Cerci and pastured. I rather Myssa house and old hotel. frumes of avine Koberny W. Va bourday shortly after y turned Carpinus lift ma small wood was second growthy toward Freat month mi

2090 When slope is remely Strub lage frest of queros primes Conglus chuits on almost bare and Vakumen of enjulous much fallen chestrus finilar volundigolis Ruby Finders our; Gabrinum accupation garrerally roest plops Cartestay Kalmes Cartestay Kalmes Vaning Robins Land bery Litter Menzieria pelosa Winchesler Vassinium vacillan (bly . contractor) Robing prends a care Umelanchia fin came through Jaylussacia baccala gory turnstill Unternam platag show chaining Tolystichen acrosticherde Goodyers publicens gione of small line ferencem maculatum verginian to roundly Divines quaterrity abundant, 50 2 Potrychum vogemann Amilacine recover amenjuga Gh. onner - Kalming of Thropestion colceoling Therryieria abundant adiantim pedelun Vaccinium Galian Trytom Potentilla Circaes quadrisuleste Rubins frifysemachia vertrullate Gumaplula desmotion met of the tragaria fordage of carra Curila origanosh Hedyote hugines in longitude Heracium versum Cupatrum my my

156 Raving with steam Earling Large Botula larily are metrum fre de de Come plude Collinson alm Moderly armenta commención Believe alleghanow 9.2 mi. from give 1,3 mi from main od. Lucas property - one corner projects own into W. Va. Rost tract across road -23 acres Laurel. White Oak. new RAD # 2 germantour Md. area whove Lucas tract is 56 acres. Imal stream comes from thes.

158 Frederick a. Held topped fune 13 - west slope of great month mountain, south of gore in second growth frest 1964 Virginia 159 815-830 m. several culms from base, erect. mall tufts, erect. V 2 in old abandoned road 12 57 Panieum common in old abandared no 58 Carex occasional in old abandmet ra tree & m. Tall; sterile. 59 amelanchies Discarded - windequatespec] 60 Ostrya virginiana ordariand mean stream flower yellow. 61 Lysimachia local on wet ground LV Dennstaeltig punctilobala locally abrundant in moist places. 63 streptopus noseus very local in naving shoul zim. tall. 69 almis serrelatus Wills. very local in wet navine 65 Lycopodium lucidulum Muy abundant colony in wet raving. flowen yellow 44 Denothera perennis d. sterile large shoul. 67 Carpinus carolinamus occasional in navine 68 Complistis americanus very abundant locally under quereus rulra

160 1964 Virginia Frederick G. 161 should 1 m. tall, flower 45569 Kalmia latifolia sterile shoul. 12 locally very abundant 11 70 Hammamelis Virginiana. L. occasional flower pentice white 12 71 aselepras quadrifolis occasionas nosts yellow; flowers 72 galium latifolium Michy maron. common 1, 73 Carex nare woody very, climbing 11 74 Vitis in trees, leave slightly common - Trale. beneath. Trep 10 m. calp, 15 cm. 75 Juglans cineres thich; muts on ground. occasional, on nochy slope leaves dark green, XI 76 Chimaphile marulate marked with polo. occasional 77 Carex occusional large tree; leaves 78 acer nigrum var glaveum slightly glaveres beneath. stircel 0.7 m. talo, 12 79 Menziesig piloza leaver very slightly glancone beneath. culms procumbent, 2 80 Carex leaves green. occasional pale yellowish white. Hypopily monotrops by popily stor primoranes ascending 82 Rubus flagellaris benicans almost prostrat occasioned on this soil 33 Sfiracy betulactilia v conymon 4 84 Hieracium venorum leave red-veined heads yellow.

Frederich Co. 1964 Virginia 163 flower almost whit 45585 Hedyotispurpure v. longigslig 11 86 (fern) Dennstaedika purctiloba (Michx.) moore 37 Potentilla occasional 11 38 Dryspteris marginalis DA. GRAY. Fr 89 Carex recasional 90 Festures oblus organia nage 1, 91 galium circaegans 12 92 Botrychium virginianum conting 11 93 (gungues) Polypous umbellatus Pero ex 72. (spe

UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

CROPS RESEARCH DIVISION BELTSVILLE, MARYLAND

June 18, 1964

To:

F. R. Fosberg

From:

C. R. Benjamin
Mycology Investigations, CPRB, CRD L. R.

Subject: Identity of Fungus, per your memo dated June 14, 1964

The fungus that you recently sent to us as No. 45593, collected in deciduous woods on Great North Mountain, has been examined and identified by Mr. J. A. Stevenson, who found it to be Polyporus umbellatus Pers. ex Fr. The family name is Polyporaceae. This particular species of polypore is a fleshy type and was partly decomposed when received. Unfortunately, therefore, it had to be discarded.

Plants of VIRGINIA Frederick County

Polyporus umbellatus Pero. ex. Fr.

Locality West slope of Great North Mountain, south of Gore.

Occurrence Rare in dead leaves in second growth forest.

Date June 13, 1964 Alt.815-830 m

Coll. F. R. Fosberg No. 45593

(specimen discarded by people at Remarks Beltsville).

162 1964 Vinginia Frederich Co. 163 45585 Hedyotisturpures v. longigolig flowers almost whit. 11 86 (gern) Dennstaedita punctiloba (Michx.) moore 87 Potentilla flowers yellow. occasiona 28 Dryspteris marginalis (1) A.GRAY. Fronds strongly rare beneath, glavious 11 89 Carex recasional 11 90 Festives obling culm ascending. orano nare 1, 91 galium circaegans flowers pale green, 92 Botychiun verginianum comman VI 93 (Gungues) Polyporus umbellatus Pera ex 72. (specimen discarded by people at Beltsville). nane in dead leave,

1964 Rennighmana 1444 maryland 164 165 June 21 Finge Lwany 1700' June 20 - Cowdenvill Reserve 2 mi. m. of frostburg New joans property for Museum & mature center. When next & Grand Old fram land was crosses there is a broll with out apple. serve of Vaccinium on stope for many iften Compression amelandies to closed three tet, Open Celhus et about at top with a few Klisdodendin vongemen, Crategue very thin nemofranther, etc. -oril - shaly. about 3 mitall, varying Down below patchery from nather love to dense word and spen greater with realtered tree, to 10 m. of Laver ucher June 21 - small marry alleganiena, Myssa magnolia avin. Love abot with alnus os derminant or Cyping slightly ligher east nit with rim with varyour Careje, anelanetries Velumom carrindo medow with mixture Here ground covered by Symplocarpy of typenic. of Irlideas, etc. & much Caron My, Malletin. Egusetum arrons -young fambren canaders, Chump of alnum many 3 from homorely Welypten palristro Drypheni Rosa palesti. Galinin Caltha

166 1964 Dennsylvania labelety June 21 - 3 2/2 mi. 2. of Berlin 45594 Stellaria graminifolia locally tommon 95 Denothera very local 96 Equisetum arvense var, brealis 12 97 Crumes virginiana 14 98 almer in managora (DuRai) ffr. June Maryland June 21 - Finzel Swamp, in scrubby swamp 99 Caltha palustus 1 45 600 Pyrus (armig) 01 Lyonia ligustuna (occasional 02 amelanchier common 63 Vyrus (armia) common 04 Nemopanthus common 05 Vibrumum commy D6 Viburnum cassinvides

nother plant, florers white.

shout; fruit immature shout 3 m. tall. leaves glaucour beneath.

should 2 m tall,

should and my fruits

should 3 m tall, fruits

crimon, sweetish but

not very good.

should 2 m tall;

fruit immature.

should 2 m tall,

puits immature.

should 3 m tall; flowers

white,

white,

m talf, buds mly

sherandrah national Park 171 1964 Virginia table tiff July ? - just m of Spitler Knoll 45616 Tilia heterophylla Vent. tree 8 m, tell, leaver notably white beneath. July 4 - Elk Wallow Shelter in oak-hickory words flowers white. 17 Circaea quadrisulcata va. canadera (L.) Hara flowers whitish. 18 harriella canadensis ncommon 19 Kubus occidentalis primoranes evert, reasional floricanes procumbent; fruits turning black. 20 Bromus japonieus culms erect name along Truit foetid, white Cimicifuga nacemos common breally 22 Tilia americana young understory tree 8 m. tall sterile. occasional B) Carex secasional Grands strongly ascending 24 Dryoptens "spinulosa" from short erest huzome. in bottom of dry rochy rain 4 25 Dryopteris marginalis fronds strongly ascending from short erect rhizom, unde surface glancous. He Demostaedtig & punctilobula (Michx) MOORE sterily occasional 27 asarum canadens all seen steine hymne locally very common with strong gruger adar.

172 1964 Vinginia 45628 Festura obtus occarional 11 29 Tilig americans v neglects occasional 30 Kryopteris "spinulora occasional 31 galium triplorum van. asprelligen common 12 32 Chaspium 33 Lindera benzoin locally common on flat ground 34 Galium cincaegans miche. 33 Viola publiscens dit. var. publice July 4 Ells Wallow Pienie ground 5 36 Cornus alternifolis occasional in valewoods July 4 - fint blogline & rine just north of browntown Valley available in edge of mixed hardwood fred 37 Juglans cinerea occasional 17 38 Ostrya virginiana corhinn 14 39 Tilis americana d. occasional

therandosh nat. Inh 173

culms areling

steinly understory tree
7 m. tall.

prostrate

prostrate

handred at base,
stems are erect,
fruit immature.
shoul 3 m. talp, pruit
immature.

stems arrending.

thout 3 m. Tall (others seen to 5 m.); fruit immature.

tree , puit immature
tree 8 m, Tell.

Tree 3 m, Tell.

tree 20 m. Tall; flowers cream yellow, very fragrant. July 4 Fort Wyndham RochoSpectacular outerry of
fine hard sandstone
with great cracks.
Tiling of heterophylls and
Betula Lenta frest nathe
ofren gaylussacia bacuta
so dry the fits inflo. are
remply died up.

July 5. Limberlost Trail
Thickets of alnus rugors
in old orchard, with apple,
crab apple, Hamamelis, de-

Intemperate proper a good growth of worderate size Isuga scattered weny large old oralis of several hinds many decaying stumps. Must have been a magnificent oak-chestnut frest but logged and Isuga came in the large oak and use those not worth cutting

Finder from beginning of funberlost Trail at parking lot, a chestnut sprowt about 201 high 8-10 cm diam. has a large blight beginn on one side, a healed one mother side. Beside this is a dead

This shrout is beginning to flower at top.

Big Meadows furampthe open place in center with buch bean in har no water even in hoter. Mud is stillwet frince flowering abundantly at lower end the stream is completely dry. Denothery frution, has become much may abundant they I have seen before.

Glestmut + black oak so. of Jeremy's Rum Overlook

Alemandrah nat, Park 177 1964 Virginia 176 tobels 777. July 4 - Fort Wyndham 1 Rochs, north of Compton grap on great sandstone boulders in muxed hardwood freet 45640 Ribes depressed contacted common shrub, not spring. 41 amelanche occasional 42 Tilia heterophylla tree 15 m. tall, leaves rishite beneath. common tree 10 m. tall, broken. 43 Betula lenta common extenser mino, Vites aestivali, var, argente (mun,) tem. leaves white beneally common climbing 1 45 Gayluracia baccata showly 0,7 m, call local suffering from drought, almost willed. 3 46 Ribes shout 0.6 m. tall, becarional leave dark green, same - on willy growing around great sandsly Coulden in mises 2 47 Eyrimachia guadrigolia flowers yellow stem, decumbent 1 5 48 Scutellaring ovaly var. local (also neen on to ascending, flower the, boulders) 5 49 Prunus virginiang shrubs in 3 m. talo abundant - fruit immature To aguilegia canadensis erect; spurs and sepals red, petal limb yellow.

1964 Virginia 178 45651 Circaly quadrisulcata may. ered, blower white, cunadensis (6) Hang stigmes not deeply cleft. common 1, 52 fmilax herbace, fruit immatay. July 5 - above Elle Wallow along trail in oals-hickory 53 Juglans cineres
occasional Tree 20 m. tall. 54 Thalistrum branched from base, eved, flowers lavender. emmon 55 teonums cardiaca very local erect, blowers yellow. 56 Oxalis corniculata var. common 57 geranium 58 Oxaliscorniculate va. for the same of th July 5 - just north of Jeremy's Run Overlook, flayling Pring. 59 Castanea dentata sprouts for about & m. Tall, dead at lot. 60 querens velutina ore 15 m. tall. and common July 5 - Old Rag View overlook of white flowers, 1.5 m. Tap. 41 yuren smalliana single plant beside road

180 1964 Virginia July 5 - Milamis gars 45662 Forophularia nane 12 63 galium verum L. dense colony 5 m. acron 16 64 Denothera Meadows Swamp end of desicrating sphagner boy 65 Osmunda regalis 2 66 arisaema stervardsonii 2 67 Onrelea sensibilis very common same - in drainage ditch V3 68 (gran) occasional \$3 69 Cerastium along path

Shenandoah nat. Pack 181

erect corollar darly bronge, a brownish meron. stems erect from a matter bring rhigomes, buds yellow.

flower bright yellow, openbut badingat 3:30 p.m.

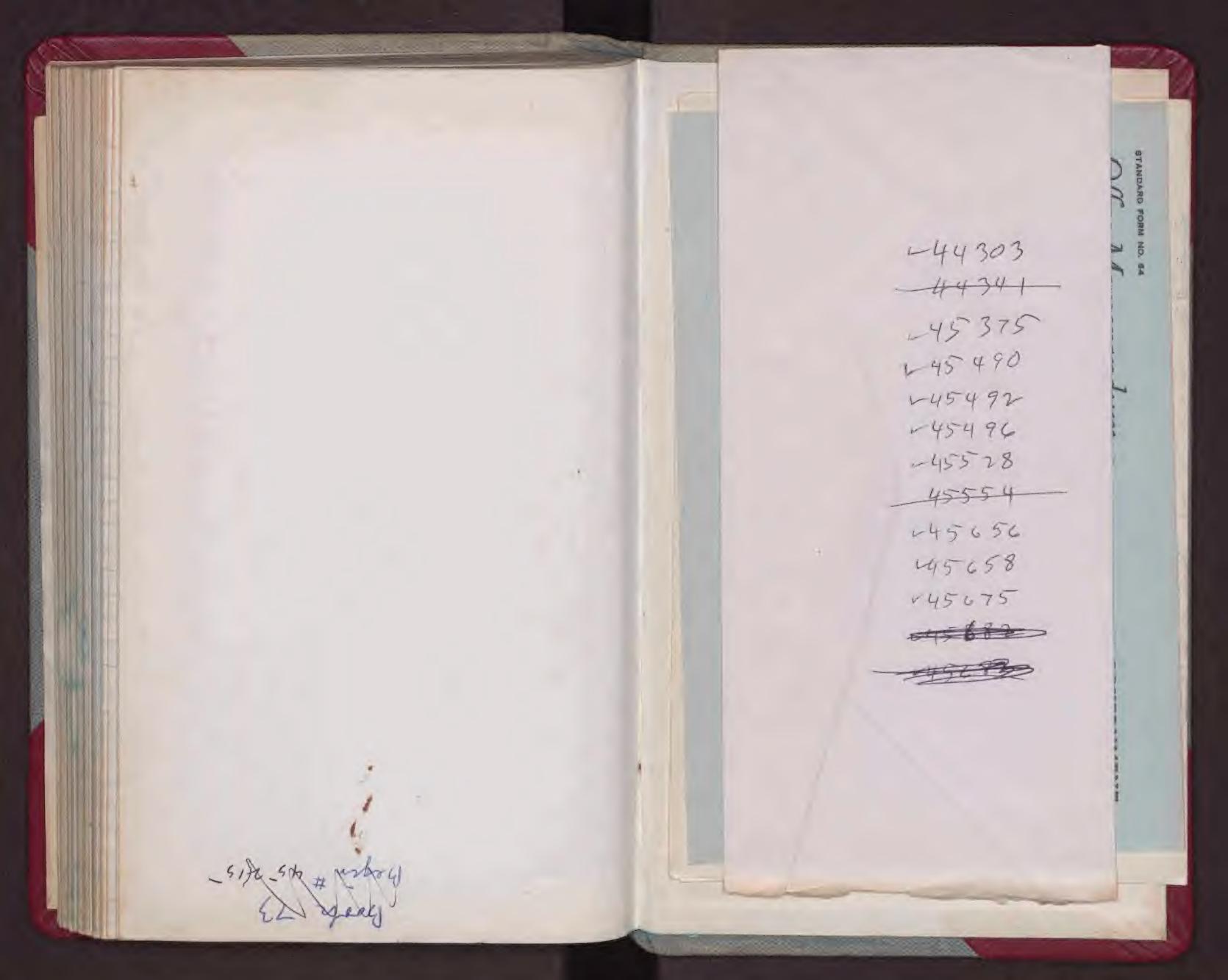
fronds erest, in dense clumy
spattle strongly flutery
without, fluting, white,
rest of spattle green except
blackiel - manoon stripes
within corresponding of
areas between flutings,
spadis pale green.

erect clump.

petals white, bifid.

1964 Virginis Thenandowh Net Park 183 July 5 - Big meadows Pienis grown flowers deep crimon-45 670 Dianthus armeria very common flowers white. 1 1 71 Hianthus armeria rare, with pinh form July 5 - Trail to Limberlost, I flyting Drive In semi-open level young tree 10 m. Call, 72 Tilia heterophylla Vent. shaded slensely branshed shoul 73 Crataeque 3 m. tal; fruit green. common 74 (gran) common along trail in shade 75 Oscalis large shrubs a small tree 76 alnus rugosa (Dukri) ffr. locally common, firming to 5-6 m. tall, back nich Thicket, from with conspicuous Trale lenticels; leaves bluish green beneath. 77 Ribes 78 flex mintang shoul 0,3 m. Call, fruit green. show 3 m tall; fruit immature. 12 79 fysimachia quadrifoly flowers yellow. 'common

184 1964 Vinginia Fringer G. 185 July 12 - fleepry Hollow in small thicket on 45670 acer of saecharina shoul 3 m tall sterile. leaves very glaveous beneath. should 1.2 m, tall 19 81 acenginala leaves green beneath July 19 - fleshy Hollow, 12 82 opalis ered, flowers yellow. 4 33 Oxalis





2039 K Street, N.W. Washington, D. C. 20036



Dr. F. Raymond Fosberg 212 Holmes Run Road Falls Church, Virginia

Office Memorandum · UNITED STATES GOVERNMENT

DATE: June 14, 1964

Dr. C. R. Benjamin

Div. of Mycology

FROM : F. R. Fosberg

SUBJECT:

Identity of fungus.

Enclosed is an extraordinary mushroom that I found in an area that the Nature Conservancy is planning to preserve for future scientific study. One of the first needs is an inventory of the plants and animals.

Could you please take a look at this thing and, if possible, send me its name (also the family). You can send the name to me. care of National Research Council

Stop 44

by governmentn messenger service.

Thank you,

FIELDTRIP

Mry 14

Leaders: FOLDATS, E.

VARESCHI, V.

Merceay (6.50 c.m.) - Encrucijada (Bruckfast) - Sen Juan de los Morros Sen Sebastion - Observation stop - San Casimiro - Senta Teresa CaucaguaObservation stop - San José de Rio Chico - Puerto Píritu (Lunch) La Caiba (Observation stop) - El Tojaro (Observation stop) - Jusepin
(Might).

Observations: ant opic savannes

flooded savannes

savanne on sandy soils (Monages)

Il Howard E. Weaver 605 E. Florida Ceve Urbang Ill. asste Prof. Defit. of Recreation -5172-5th # riskory

